

IN THE CLAIMS

1. (PREVIOUSLY PRESENTED) Apparatus for processing image data comprising:  
storage means for storing instructions;  
memory means for storing said instructions during execution and for storing image data;  
processing means for performing image processing in which said image data is processed to  
modify colour values; and  
display means for facilitating user interaction with said image processing, wherein  
said processing means is configured wherein, in response to said instructions, said image data is  
processed by the steps of:  
identifying, through input from a user, a colour vector and a luminance range for said colour  
vector, wherein said luminance range is identified by the user independently from the identifying of the  
colour vector;  
defining a colour vector function in response to said identifying; and  
modifying colours in response to said luminance range with reference to said colour vector  
function.
2. (ORIGINAL) Apparatus according to claim 1, wherein said colour vector function is  
defined by points on curves.
3. (ORIGINAL) Apparatus according to claim 1, wherein said colour vector function is  
animated.
4. (ORIGINAL) Apparatus according to claim 1, wherein said colour vector function is  
defined by applying said identified colour vector to a previously defined colour vector function.
5. (ORIGINAL) Apparatus according to claim 1, wherein said colour vector function is  
expressed as a look up table addressable by luminance values of image colour data.
6. (ORIGINAL) Apparatus according to claim 1, wherein said colour vector function  
defines red, green and blue displacements with reference to barycentric co-ordinates.

7. (PREVIOUSLY PRESENTED) Apparatus according to claim 1, wherein the user performs operations to control said image processing with reference to a graphical user interface presented on a monitor, said interface including a plurality of widgets for facilitating user communication with said processes for modifying colour values.

8. (ORIGINAL) Apparatus according to claim 7, wherein said identification of a colour vector is performed with reference to a user input of co-ordinates from a two-dimensional trackball widget, in which the dimensions controllable from said trackball are dimensions of pure colour.

9. (ORIGINAL) Apparatus according to claim 7, wherein said colour vector is displayed as a graph having three lines, one for each of red, green and blue colour components, said graph having a first axis indicative of colour vector and a second axis of luminance.

10. (PREVIOUSLY PRESENTED) Apparatus for processing image data comprising:  
storage means storing instructions;  
memory means for storing said instructions during execution and image data;  
processing means for performing image processing in which said image data may be processed to modify colour values; and  
monitor means for facilitating user interaction with said image processing, wherein:  
said processing means is configured wherein, in response to said instructions, said image data is processed by a first step of:  
initialising a colour vector function, in which colour vector is a function of luminance;  
and then repeated steps of:  
identifying, through input from a user, a colour vector and a luminance range for said colour vector, wherein said luminance range is identified by the user independently from the identifying of the colour vector;  
updating said colour vector function with said identification;  
processing source image data to identify luminance values;  
modifying source image colour in response to said identified source luminance values with reference to said colour vector function; and

previewing said modified source image.

11. (PREVIOUSLY PRESENTED) A method of processing image data in an image processing system, wherein the image processing system comprises memory means for storing instructions and image data, processing means for performing image processing in which said image data is processed to modify colour values,

said instructions defining colour modifying operations to be performed by said processing means to process said image data, wherein said operations comprise:

identifying, through input from a user, a colour vector and a luminance range for said colour vector, wherein the luminance range is identified by the user independently from the identifying of the colour vector;

defining a colour vector function in response to said identification, in which colour vector is a function of luminance;

processing source image data to identify luminance values; and

modifying colours in response to said luminance values with reference to said colour vector function.

12. (ORIGINAL) A method according to claim 11, wherein said colour vector function is defined by points on curves.

13. (ORIGINAL) A method according to claim 11, wherein said colour vector function is animated.

14. (ORIGINAL) A method according to claim 11, wherein said colour vector function is defined by applying said identified colour vector to a previously defined colour vector function.

15. (ORIGINAL) A method according to claim 11, wherein said colour vector function is expressed as a look up table addressable by luminance values of image colour data.

16. (ORIGINAL) A method according to claim 11, wherein said colour vector function defines red, green and blue displacements with reference to barycentric co-ordinates.

17. (PREVIOUSLY PRESENTED) A method according to claim 11, wherein the user performs operations to control said image processing with reference to a graphical user interface presented on a monitor, said interface including a plurality of widgets for facilitating user communication with said processes for modifying colour values.

18. (ORIGINAL) A method according to claim 17, wherein said identification of a colour vector is performed with reference to a user input of co-ordinates from a two-dimensional trackball widget, in which the dimensions controllable from said trackball are dimensions of pure colour.

19. (ORIGINAL) A method according to claim 17, wherein said colour vector is displayed as a graph having three lines, one for each of red, green and blue colour components, said graph having a first axis indicative of colour vector and a second axis of luminance.

20. (PREVIOUSLY PRESENTED) A method of processing image data in an image processing system, wherein the image processing system comprises memory means for storing instructions and image data, processing means for performing image processing in which said image data is processed to modify colour values,

said instructions defining colour modifying operations to be performed by said processing means to process said image data, wherein said operations include a first step of:

initialising a colour vector function, in which colour vector is a function of luminance;

and then repeated steps of:

identifying, through input from a user, a colour vector and a luminance range for said colour vector, wherein the luminance range is identified by the user independently from the identifying of the colour vector;

updating said colour vector function with said identification;

processing source image data to identify luminance values;

modifying source image colour in response to said identified source luminance values with reference to said colour vector function; and previewing said modified source image.

21. (PREVIOUSLY PRESENTED) A computer-readable medium having computer-readable instructions executable by a computer configurable for image processing, said computer comprising memory means for storing said instructions and image data, processing means for performing image processing in which said image data is processed to modify colour values, said instructions defining operations to be performed by said processing means to process said image data, wherein said operations comprise:

identifying, through input from a user, a colour vector and a luminance range for said colour vector, wherein the luminance range is identified by the user independently from the identifying of the colour vector;

defining a colour vector function in response to said identification, in which colour vector is a function of luminance;

processing source image data to identify luminance values; and

modifying colours in response to said luminance values with reference to said colour vector function.

22. (ORIGINAL) A computer-readable medium according to claim 21, wherein said colour vector function is defined by points on curves.

23. (ORIGINAL) A computer-readable medium according to claim 21, wherein said colour vector function is maintained.

24. (ORIGINAL) A computer-readable medium according to claim 21, wherein said colour vector function is defined by applying said identified colour vector to a previously defined colour vector function.

25. (ORIGINAL) A computer-readable medium according to claim 21, wherein said colour vector function is expressed as a look up table addressable by luminance values of image colour data.

26. (ORIGINAL) A computer-readable medium according to claim 21, wherein said colour vector function defines red, green and blue displacements with reference to barycentric co-ordinates.

27. (PREVIOUSLY PRESENTED) A computer-readable medium according to claim 21, wherein the user performs operations to control said image processing with reference to a graphical user interface presented on a monitor, said interface including a plurality of widgets for facilitating user communication with said processes for modifying colour values.

28. (ORIGINAL) A computer-readable medium according to claim 27, wherein said identification of a colour vector is performed with reference to a user input of co-ordinates from a two-dimensional trackball widget, in which the dimensions controllable from said trackball are dimensions of pure colour.

29. (ORIGINAL) A computer-readable medium according to claim 27, wherein said colour vector is displayed as a graph having three lines, one for each of red, green and blue colour components, said graph having a first axis indicative of colour vector and a second axis of luminance.

30. (PREVIOUSLY PRESENTED) A computer-readable medium having computer-readable instructions executable by a computer configurable for image processing, said computer comprising memory means for storing said instructions and image data, processing means for performing image processing in which said image data is processed to modify colour values, said instructions defining operations to be performed by said processing means to process said image data, wherein said operations include a first step of:

- initialising a colour vector function, in which colour vector is a function of luminance;
- and then repeated steps of:
- identifying, through input from a user, a colour vector and a luminance range for said colour vector, wherein said luminance range is identified by the user independently from the identifying of the colour vector;
- updating said colour vector function with said identification;
- processing source image data to identify luminance values;

modifying source image colour in response to said identified source luminance values with  
reference to said colour vector function; and  
previewing said modified source image.